

InterICE

Short report on distinctive features of the ice core laboratories in NIPR and ILTS, Japan

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1. **Field Procedure:** In case of the Dome Fuji deep ice core, all core samples were vertically slit into three pieces: one for stable isotope, chemical and micro-particle analyses (sending to NIPR), another for stratigraphic analyses and physical properties (sending to ILTS), and the rest for gas analyses and preservation for future analyses (sending to NIPR and ILTS, and keeping in the site as well). All cores are packed in cardboard boxes with snow for shipping.
2. **Accession Procedure:** The two labs share the accession of the Dome Fuji core according to the policy stated above. Many ice cores recovered at different sites other than the Dome Fuji are also stored in both labs. New accessions to the labs are determined by considering the purposes and the capacities of the storages.
3. **Storage Procedure:** To keep ice core quality, the ice core lab in ILTS is equipped with a cold storage at -50 deg C. This temperature was determined so as to decrease the dissociation probability of hydrates smaller than 5% for ten years on the basis of the preliminary dissociation experiment.
4. **Curation Procedure:** All the Dome Fuji ice cores stored in NIPR, ILTS and the Dome Fuji are managed by both NIPR and ILTS using the common core list. After the basic analyses of the cores, which were carried out by the project group, any proposals for the ice cores have been discussed by the steering committee named ICC (Ice Core Consortium). A researcher whose proposal is approved by ICC does sampling of the ice cores in either NIPR or ILTS according to the purpose.
5. **Deaccession Strategies:** Some old ice cores and cores under no proposals are stored in commercial storehouses in order to have enough spaces in both labs. We have no other deaccession strategies at present.
6. **Processing ice cores:** Clean condition at -10 to -20 deg C is kept by specially designed room and equipments in both labs.

7. **Shipping:** All ice cores were shipped from Antarctica to Japan by the icebreaker Shirase equipped with a cold storage at -20 deg C. In addition to this storage, a deep freezer down to -80 deg C was also used for the selected ice cores during the shipping in order to observe the effect of storage temperature.